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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,606	01/14/2004	Nagatoshi Kurahashi	501.43335X00	1657
20457	7590	06/29/2005	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873			CHIENT, LUCY P	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/756,606	KURAHASHI ET AL.	
	Examiner	Art Unit	
	Lucy P. Chien	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-13 is/are allowed.
- 6) ☒ Claim(s) 5 is/are rejected.
- 7) ☒ Claim(s) 6-9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

Examiner listed species:

Species I: The specifics being the arrangement disclosed in Figures 1A, 1B, 2A, 2B, and 2C. The distances established are $b > c$ and $a > c$, described as embodiment 1.

Species II: The specifics being the arrangement disclosed in Figures 3A, 3B, 4A, 4B, and 4C. The distances established are $a \geq 0$ and $b > cx2.0$ described as embodiment

2. **Species III:** The specifics being the arrangement disclosed in Figures 5A, 5B, and 6. The distances established are $a > b$ and $bx0.5 < c$, described as embodiment 3. **Species**

IV: The specifics being the arrangement disclosed in Figures 7A, 7B, and 8. The distances established is $a >$ distance b is established, described as embodiment 4.

Species V: The specifics being the arrangement disclosed in Figures 9A, 9B, 10A, and 10B. The distances established are $a \geq 0$ and $b \geq 0$, described as embodiment 5. **Species**

VI: The specifics being the arrangement disclosed in Figures 11A, 11B, and 12. The angles setting is the angle θ to $90^\circ \leq \theta \leq 180^\circ$. And the distance of $a > b$, (preferably set to $(a-b) > c$), described as embodiment 6.

Applicant's election with traverse of Species II, with claims 5-11 in the reply filed on May 25, 2005 is acknowledged. The traversal is on the ground(s) that 5 and 10 are generic independent claims (Response to Restriction Requirement at page 2). Examiner acknowledges that Claim 5 and 10 are generic and will examine Claims 5-13.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 5 is rejected under 35 U.S.C. 102(e) as being unpatentable by Nishida et al (US 20020159016).

Nishida et al discloses (Page 3, [0037]) a liquid crystal display device comprising first and second substrates, a liquid crystal layer interposed between the first and the second substrates, a plurality of scanning signal lines and a plurality of data signal lines which are formed on the first substrate,

In Figure 40 (part of the same embodiment as (page 3 [0037]) disclose a common signal line (126a) which are arranged close to the scanning signal lines (128), wherein each unit pixel which is formed as a region surrounded by adjacent scanning signal lines (128) and adjacent data signal lines (124) includes a pixel electrode (127) to which signals of the data signal line (124) is electrically supplied through a thin film transistor (130) and a common electrode (126) which is electrically connected with the common signal line (126a). The common electrode (126) is arranged to be superposed on the common signal line (126a) by way of an insulation layer (Page 9, [0512]), and the pixel electrode (127) is electrically connected with a source electrode (130b) of the thin film transistor (130) via a through hole (139b) which penetrates the insulation layer

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(Page 9, [0512]), and a portion of the pixel electrode (127) includes an overhanging portion which overhangs above the common signal line (126a) from the unit pixel.

Allowable Subject Matter

Claim 6-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following statements indicate reason for allowability:

Regarding Claim 6, Nishida et al discloses a source electrode (Fig. 40 (130b)).

Nishida does not disclose the source electrode having a projecting portion that superposes on the overhanging portion of the pixel electrode and is formed in a direction that faces the overhanging portion in an opposed manner.

Regarding Claim 7, Nishida et al does not disclose the distance of projecting portions of the source electrode from an end portion of the common signal line that is "a" and the distance is $a \geq 0$.

Regarding Claim 8, Nishida et al does not disclose the distance "a" as disclosed above plus the direction parallel to the scanning signal line at the pixel electrode "b" and "c" that is a direction parallel to the scanning signal line in the overhangin portion of the pixel electrode. The relationship being $b > cx2.0$.

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Regarding Claim 9, Nishida et al does not disclose the common electrode extending in the inside of the unit pixel while covering the common signal line except for a portion along the overhanging portion of the pixel electrode.

Claim 10-13 are allowed.

Regarding Claim 10.

The prior art does not disclose nor does not reasonably suggest the enlarged portion which bridges over the common signal line from the inside of the unit pixel and the common electrode is formed such that it extends into the inside of the unit pixel while covering the common signal line except for portions along the enlarged portions of the pixel electrode.

Claims 11-13 are dependents of Claim 10 so are therefore allowable.

Regarding Claim 11, Nishida et al does not disclose dimensions claimed of the enlarged portion of $a > b$.

Regarding Claim 12, Nishida et al does not disclose dimensions claimed of the enlarged portion of $b < 2c$.

Regarding Claim 13, Nishida et al does not disclose the enlarged portion of the pixel electrode blocking electric field from the common signal line.

It is the examiners opinion that these limitations show novelty over the prior art and are therefore allowable.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucy P. Chien whose telephone number is 571-272-8579. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571)272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lucy Chien
Examiner
Art Unit 2871
LC



DUNG T. NGUYEN
PRIMARY EXAMINER